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APPLICATION NUMBER: 10/922,484

FILING DATE: August 20, 2004

RELATED PCT APPLICATION NUMBER: PCT/US04/36035

Certified by

Jon W Dudas

Acting Under Secretary of Commerce for Intellectual Property and Acting Director of the U.S. Patent and Trademark Office



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Approved for use through 07/31/2006, OMB 0651-0032

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UTILITY PATENT APPLICATION **TRANSMITTAL**

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No.	20712-0124	
First Inventor	FREIRE	0
Title	ARRANGEMENT USED IN ANGLE PIECES AND STRUCTURAL PROFILES	9.8
Express Mail Label No.	ER 659183225 US	25° 20°

APPLICATION		ADDRESS TO:		tent Application er for Patents	9587 10/9		
See MPEP chapter 600 concerning utility p	natent application contents.				15.		
See MPEP chapter 600 concerning utility patent application contents. 1. Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a displicate for (see processing)) 2. Applicant claims small entity status. See 37 CFR 1.27. 3. Specification [Total Pages 5] (preferred arrangement set forth below) - Descriptive title of the Invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence Isting, a table, or a computer program listing appendix - Background of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure 4. Drawing(s) (35 U.S.C.113) [Total Sheets 5] 5. Oath or Declaration [Total Sheets 1] a. Newly executed (original or copy) b. Copy from a prior application (37 CFR 1.63 (d)) (for a continuation/divisional with Box 18 completed) i. DELETION OF INVENTOR(S)							
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Prior application information: Examiner Art Unit: For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under 8ox 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.							
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☐ Customer Number	☐ Correspondence address below						
Name	Name						
Address							
City	State		Zip Code				
Country	Telephone		Fax				
Name (Print/Type) Brian T	Name (Print/Type) Brian T. Sattizahn			Registration No. (Attorney/Agent) 46,401			
Signature	B17 5	that	Date	August 20, 2004			

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Complete If Known

FEE TRANSMITTAL			Application Number N/A								
C EV 0004			Application Number N/A Filing Date August 20, 2004								
			First Named Inventor FREIRE								
Effective 10/01/2003. Patent fees are subject to annual revision.			First Named Inventor FREIRE Examiner Name N/A								
			Art Unit N/A								
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SUBMITTED BY Complete (if applicable)											
Name (Print/Type))	Brian	T. Sattizahn	Registration No. (Attorney/Agent)			46,401		Telaphone	(717) 237-525	8
Signature			137	Sattr	al				Date	August 20, 200	04
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on_	August 20, 2004	_ _
	Date	
		Fatricia & Ballantine
		Signature
		Patricia L. Ballantyne
		Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

- 1. Return Acknowledgment Postcard
- 2. Utility Patent Application Cover Sheet
- 3. Fee Transmittal Form (in duplicate)
- 4. Patent Application (5 pages)
- 5. Drawings (5 sheets)
- 6. Unexecuted Declaration (1 page)
- 7. Application Data Sheet
- 8. Copy of Certified Copy of Originally Filed Brazilian Application

Attorney Docket No.: 20712-0124

ARRANGEMENT USED IN ANGLE PIECES AND STRUCTURAL PROFILES

The present utility model application pertains to an arrangement used in angle pieces and structural profiles, and specifically in angle pieces and structural profiles for the assembly of a cabinet of hexahedral format with rounded edges by a system of joining, which is developed as a function of its use in order to construct a cabinet for an air conditioner, and the angle pieces and structural profiles for the assembly of the structure of cabinets or multiple-use boxes of hexahedral format are closed by joints, through a closing profile used in the plates or panels, and being integrated with caps of insulation and external and internal finishing in the desired color, with the advantage of not using permanent fixation elements and of enabling the enclosure of the structures with smooth sheets configured in relief, or arranged with supports and means of containment or fixation of the equipment or item being enclosed, becoming an integral part of same.

Angle pieces and structural profiles of various formats are known, which are generally used in fixed and finished structures in the form of windows, doors, and other structures, to be supplemented with plates of plastic, glass, or metal, and providing the structural anchorage, so that these profiles can be made of light materials such as aluminum, plastic, or derivatives thereof, although it is also known that the arrangement of the existing profiles, secured in lattice shape, provides structural strength.

In the patent herein requested, the angle pieces and the structural profiles have been arranged to provide strength and ease of assembly and closure of the structure of cabinets, multiple-use boxes, and the like, by means of joints which bear the load and vibrations of an air conditioner, independently of its caps of insulation and external and internal finish, thus qualifying them for the assembly of cabinets and other products structured in hexahedral format with rounded edges, in order to be used for any desired purposes.

For better comprehension of the present patent application for utility model, refer to the enclosed drawings, in which Fig. 1 shows a structure in perspective view; Fig. 2 shows the assembly and enclosure of a cabinet box in perspective and exploded view, and Fig. 3 shows an angle piece in upper and lower perspective, its lateral view, and in section AA; Fig. 4 shows a central angle piece in upper and lower perspectives, its lateral and frontal views and in cross section AA; Fig. 5 shows the structural profile in perspective, front view and details; Fig. 6 shows the central structural profile in perspective, front view and details; Fig. 7 shows the cap of the angle piece in upper and lower perspectives, the lateral view, and the sections AA and BB; and Fig. 8 shows the cap of the central angle piece in upper and lower perspectives, the lateral view, and section AA; Fig. 9 shows the cap of the structural profile in upper and lower perspectives, and in front view, Fig. 10 shows the insulating cap of the central structural profile in perspectives and in front view; and Fig. 11 shows the profile for closing the panels in perspective and in front view.

The present Patent for Utility Model is composed for an "ARRANGEMENT USED IN ANGLE PIECES AND STRUCTURAL PROFILES", consisting of an angle piece (1) provided with three male pins (2) integrated with flanges making up an inside corner (3) to receive by joining a structural profile (4), provided with a fitting cavity (5), lengthwise retention channels (6 and 7), and an inside corner flange (8), to be matched up with an internal flange (9) of a central angle piece (10) with two axial male pins (11) and two lateral male pins (12), in which is fitted a central structural profile (13) provided with a fitting cavity (14) and lengthwise retention channels (15 and 16), in order to make up structures of hexahedral format, with a cap for the angle piece (17), a cap for the central angle piece (18), a cap for the structural profile (19) and an insulating cap for a central structural profile (20), closed in by sheets or panels (21) applied in a finishing profile (22), making up cabinets and multiple-use boxes with rounded edges.

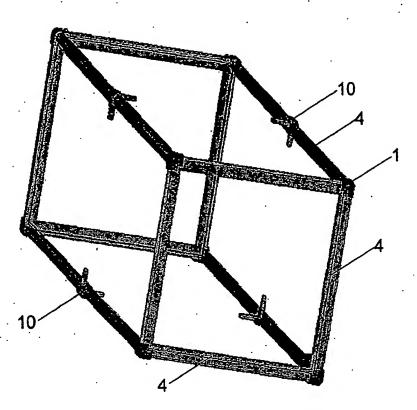
CLAIMS

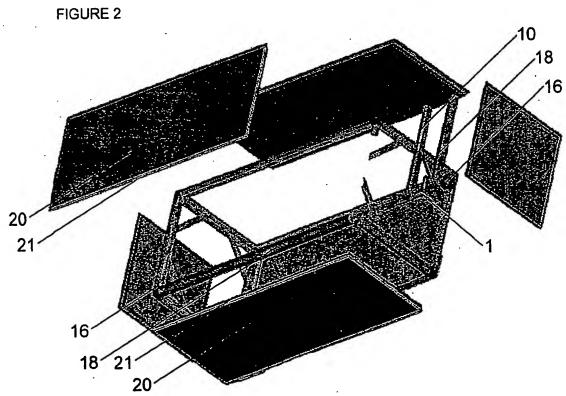
- 1. An "ARRANGEMENT USED IN ANGLE PIECES AND STRUCTURAL PROFILES", characterized by an angle piece (1) with three male pins (2) and flanges making up an inside corner (3), for joining of a structural profile (4) via a fitting cavity (5), and provided with lengthwise retention channels (6 and 7) and an inside corner flange (8), matched up with an internal flange (9) of a central angle piece (10) with two axial male pins (11) for fitting of the structural profile (4) and two lateral male pins (12) for fitting of a central structural profile (13), via fitting cavities (14), and provided with retention channels (15 and 16).
- 2. The "ARRANGEMENT USED IN ANGLE PIECES AND STRUCTURAL PROFILES", in accordance with claim 1, further characterized in that the angle piece (1), the structural profile (4), the central angle piece (10) and the central structural profile (13), make up structures of hexahedral format by fitting together, with a cap for the angle piece (17), a cap for the central angle piece (18), ca ap for the structural profile (19) and an insulating cap for the central structural profile (20), closed in by sheets or panels (21) applied in a finishing profile (22), to make up cabinets and multiple-use boxes with rounded edges.

ABSTRACT

An "ARRANGEMENT USED IN ANGLE PIECES AND STRUCTURAL PROFILES", comprised of an angle piece (1) for joining a structural profile (4), integrated with a central angle piece (10) and a central structural profile (13), in order to make up structures of hexahedral format with a cap for the angle piece (17), a cap for the central angle piece (18), a cap for the structural profile (19) and an insulating cap for the central structural profile (20) of internal and external finish, and closed in by sheets or panels (21) applied in a finishing profile (22), with the advantage of not using permanent fixation elements and of enabling the enclosure of the structures with smooth sheets or panels (21) configured in relief, or arranged with supports and means of containment or fixation of the equipment or item being enclosed, becoming an integral part of same.

FIGURE 1





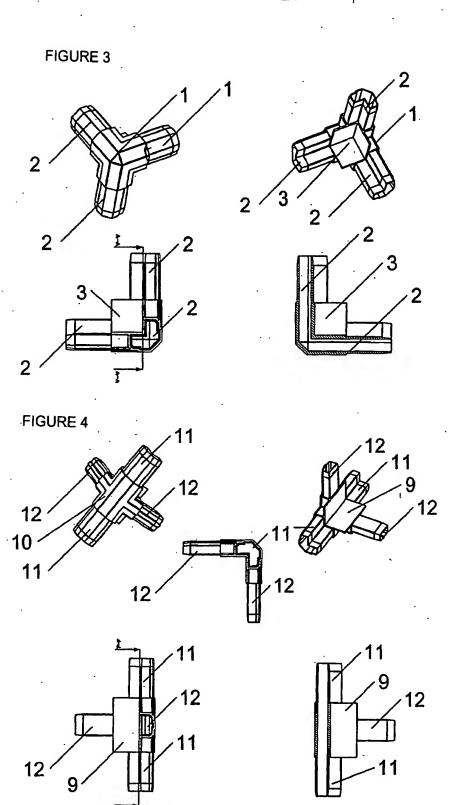


FIGURE 5

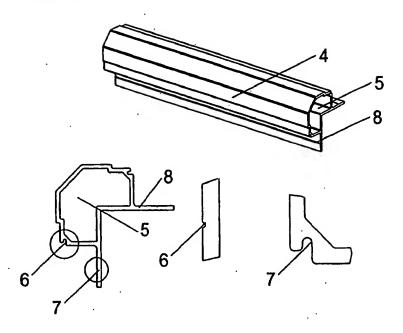
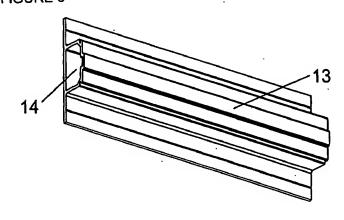


FIGURE 6



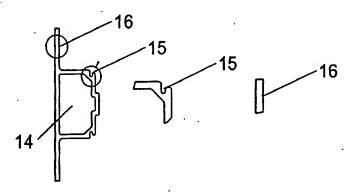
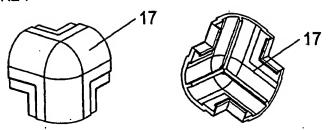


FIGURE 7



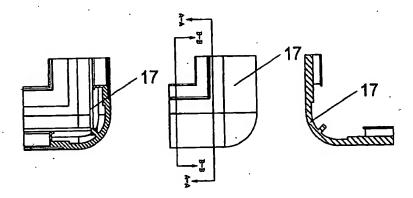


FIGURE 8

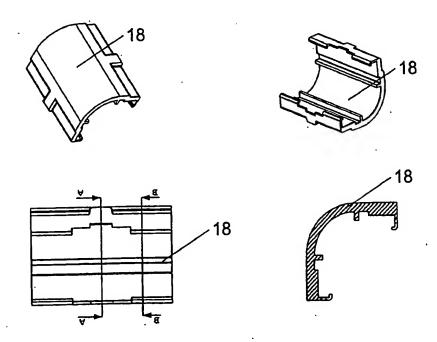


FIGURE 9

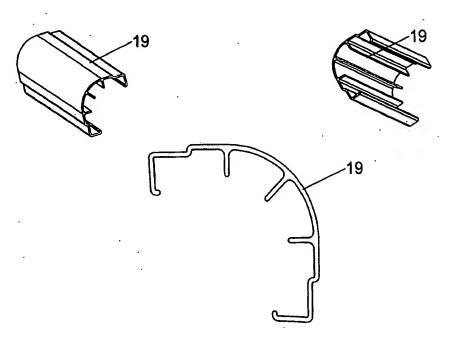


FIGURE 10

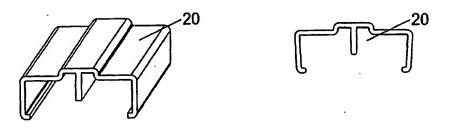
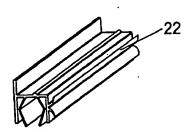
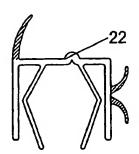


FIGURE 11





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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN **APPLICATION DATA SHEET (37 CFR 1.76)**

As the below named inventor(s), I/we declare that: This declaration is directed to: The attached application, or						
☐ The attached application, or						
The graduates abbreached at						
Application No, filed on August 20, 2004,						
as amended on (if applicable);						
I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;						
I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;						
I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application.						
All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.						
FULL NAME OF INVENTOR(S)						
Inventor one: Paulo Roberto Guichard FREIRE						
Signature: Citizen of: Brazil						
Inventor two:						
Signature: Citizen of:						
Inventor three:						
Signature: Citizen of:						
Inventor four:						
Signature: Citizen of:						
Signature: Citizen or:						

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: FREIER

Application No.:

N/A

Group Art Unit: N/A

Filed:

August 20, 2004

Examiner:

N/A

For: ARRANGEMENT USED IN ANGLE PIECES AND STRUCTURAL PROFILES

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

APPLICATION DATA SHEET

1. Applicant Information

FIRST applicant:

Paulo Roberto Guichard FREIRE

Mailing Address:

N/A

Residence:

N/A

Citizenship:

Brazil

2. **Correspondence Information**

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Name: Brian T. Sattizahn, Esq.

McNees Wallace & Nurick LLC Address:

100 Pine Street P.O. Box 1166

Harrisburg, Pennsylvania 17108-1166

Customer No.: 26587 M

3. Application Information

ARRANGEMENT USED IN ANGLE PIECES AND STRUCTURAL Title of Invention: **PROFILES** Docket number assigned to this application: 20712-0124 Suggested Classification: Class: _____ Subclass: _____ Total number of drawing sheets: 5 Suggested drawing figure for publication:
 __1 Application is not being published. Type of Application: □ Utility Application Design Application Provisional Application ☐ Reissue Application ☐ Plant Application Genus: _____Species: _____ Denomination: This Application discloses a significant part of the subject matter of an \Box application which is under a secrecy order pursuant to §37 CFR 5.2. Representative Information 4. The following have a power of attorney or authorization of agent in this Application Name of attorney (agent): \Box \boxtimes Customer No.: 26587

5. Domestic Priority Information

6.	Foreign priority Information					
	☐ No foreign priority is claimed.					
	□ Foreign priority is claimed for this application from:					
	Application No.: MU8302711-4 Filing Date: October 31, 2003 Country: Brazil					
	Foreign application(s) having a filing date b for which priority is claimed. Application No.:					
7.	Assignee Information					
Addı	The assignee(s) of this application based on fil Name of assignee: ress of assignee:	ed Assignment papers:				
	Extent of interest of assignee in application:					
Date	ed: August 20, 2004	McNees Wallace & Nurick LLC				
	one: (717) 232-8000 c: (717) 237-5300	Brian T. Sattizahn Reg. No. 46,401 100 Pine Street P.O. Box 1166 Harrisburg, PA 17108-1166				

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International filing date: 29 October 2004 (29.10.2004)

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Date of receipt at the International Bureau: 20 December 2004 (20.12.2004)

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